

IBM® OS/2® 2.1

AND DEVELOPMENT TOOLS



Programmer's Paradise®

IBM® OS/2® 2.1

by IBM Corporation

Application developers everywhere are faced with the task of building the best, most bug-free applications possible in the least amount of time. You can achieve a significant boost in productivity by taking advantage of the tremendous value that OS/2 technology offers today, versus competing alternatives.

OS/2's pre-emptive, multithreaded multitasking allows you to run multiple tools concurrently. This means you can edit in one session while a compile-and-link occurs in another, and a print job occurs in a third. By operating pre-emptively, OS/2 makes sure all running applications get the time they need to run, so that overall performance is improved. You'd typically have to work with two or more DOS machines to achieve the same level of functionality as a single machine running OS/2. Using OS/2 for application development—in particular, DOS and Windows development—thus saves times and money, and makes you more productive.



DOS and Windows developers will also appreciate OS/2's tremendous flexibility when running concurrent DOS and Windows sessions. Applications running in protected, Virtual DOS Machines, or VDMs under OS/2 have between 600K to 720K of RAM available for executions, and can address up to 32MB of expanded memory, 512MB of DOS Protected Mode Interface (DPMI) memory, and 16MB of extended (XMS) memory. Support for each of these types of memory is automatic, and doesn't require additional hardware or software support. Also, many of today's

DOS and Windows development tools work under OS/2, thereby protecting your investments in those tools.

OS/2 runs sessions, including VDMs, concurrently in separate, protected address spaces. This protection offers you greater confidence so that, if an application such as a debugger fails in one session, the remaining programs will continue to run. This one feature can significantly reduce frustration and lost time because it keeps you from having to reboot your system, restart tools, and attempt to recover lost data.

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DOS and Windows developers should also consider developing OS/2 applications as well, in order to fully exploit the power and

capabilities of today's advanced systems. OS/2 allows you to write applications with greater functionality and better performance because you can take advantage of 32-bit instructions, a 32-bit address space, parallel I/O operations, and much more. In addition to letting you tap the power of the hardware, OS/2 provides you with advanced technology such as multiple threads not implemented in the DOS environment with or without any of the popular extenders, such as Windows.

The advanced object-oriented technology integral to OS/2 enables you to become more productive in the development of new applications. IBM's object-oriented user interface, the Workplace Shell, offers users an easy way to deal with the operating system. The Workplace Shell is built using the IBM System Object Model (SOM), which supports the ability to define, construct, and use objects using a variety of languages, including non-object-oriented languages. Utilizing object-oriented technology, you can create and deliver to their users new applications with much better functionality and integration than with other applications.

OS/2 2.1 is a mature, 32-bit operating system, building on the success of its 14-month-old predecessor, OS/2 2.0. OS/2 offers you an operating system with a powerful set of features for software development. These features, such as pre-emptive, multithreaded multitasking and the ability to run protected, concurrent DOS and Windows sessions, give you a significant boost toward reducing development time and increasing productivity, whether you develop for OS/2, DOS, or Windows.

System Requirements: 386SX or better, 4MB RAM (8MB RAM recommended), 60 MB hard disk space, graphics card and monitor (VGA or better recommended).



IBM Corporation
11400 Burnet Road
Austin, Texas 78758

	List:	Ours:
OS/2 2.1:	\$249	\$139
Upgrade:	\$199	\$99

To order call 800 445-7899

IBM® Worldwide Developer Assistance Program



The IBM Worldwide Developer Assistance Program (DAP) is open to all IBM Personal Systems Products (PSP) software developers. The Worldwide Developer Assistance Program has a number of extensions that offer customized services for specific developer needs. Your eligibility for a specific service depends on the type of products you are developing.

Worldwide Developer Assistance Program (Basic Program) These include corporate developers producing in-house applications, MIS professionals, consultants, educators, industry analysts, government agencies, and others with an interest in OS/2, Lan Server, multimedia, pen, and DOS application development.

DAP services include a variety of technical, business, and marketing support services, such as:

- Technical support through IBM OS/2 forums on CompuServe®
- The opportunity to participate in early-code programs
- Access to OS/2 Application Migration Workshops, seminars, conferences
- IBM product announcements.

Commercial Services Commercial Services are available to software vendors in the U.S. and many other countries who are developing or marketing OS/2 products for *commercial release*. In addition to the Worldwide DAP services described previously, these software developers receive additional services in support of their product development and marketing activities:

- Online technical support at no charge
- Defect support for all warranted products that are supported by IBM support centers
- Complimentary access to the online database of OS/2 development tools
- Complimentary subscriptions to *IBM OS/2 Developer* magazine
- Discounts on OS/2 and related IBM software products
- Discounts on selected IBM PS/2® systems and related products
- Short-term loans of IBM PS/2 systems.

Premier Services They are for software developers who are marketing or have committed to develop an OS/2 2.x—exploitive commercial product. Premier Services members receive all of the services described in Commercial Services above, plus:

- A personal IBM advocate who provides assistance and support
- Direct E-mail access to the IBM Boca Raton Programming Center for technical support

Premier Services members may also be invited to demonstrate their OS/2 products with IBM in joint marketing opportunities.



The Next Step Call 407-982-6408 for further information.

WATCOM VX•REXX

by WATCOM International Corp.

WATCOM VX•REXX is an easy to use visual development environment for creating applications that leverage the capabilities of OS/2 2.x and exploit the Presentation Manager graphical user interface. VX•REXX combines a project management facility, visual designer and an interactive source-level debugger to deliver a very approachable and highly productive visual development environment. With the visual designer, you can graphically create Presentation Manager interface objects, quickly customize their properties, and easily attach REXX procedures to the objects. Build, test and debug your application without leaving the development environment. Then package your application as an EXE file or PM macro for royalty-free redistribution. WATCOM VX•REXX is open and extensible through IBM's object-oriented System Object Model (SOM) technology. You can access all standard REXX API's including DB Manager, because VX•REXX is based on the OS/2 2.x standard system REXX.

System Requirements: OS/2 2.0 with CSD or higher.



FEATURES

- Easy to use visual development environment
- Powerful project management facility
- Advanced interactive source-level debugger
- Access to standard REXX API's including DB Manager
- System Object Model (SOM) based object manager
- Support for multi-threaded applications
- Supports SAA CUA'91 objects.

WATCOM

WATCOM International Corp.
415 Phillip Street
Waterloo, Ontario N2L 3X2

Price:

List: \$299

Ours: \$209

Introductory offer*: \$99

*until September 30, 1993

To order call 800 445-7899 5

XVT Development Solutions

XVT's multi-platform GUI Development Solutions for C and C++ have helped more programmers develop and maintain multiple GUI versions of their software products than any other portability alternative available today. The reason is simple: XVT software is written by developers for developers—people who understand your need to quickly and easily port your application on up to seven different GUIs and more than 30 different hardware platforms. XVT Development Solutions help save significant time and expense without compromising your application's native look-and-feel on target platforms.



XVT Development Solutions include not only superior development tools, but a powerful combination of customer support, documentation, examples, training and consulting. Also included is an extensive Partners Program, offering powerful add-on and complementary products. Together they ensure your success at creating and maintaining a single source application on multiple GUIs without royalties or runtime fees.

XVT Development tools are sold separately or are bundled in either C or C++ Developer Kits. A Developer Kit or XVT Portability Toolkit is required for each target platform.

XVT Developer Kits for C include: • XVT Portability Toolkit: A layered API abstracted directly from the native environment • XVT-Design: An Interactive Design Tool (IDT).

XVT Developer Kits for C++ include: • XVT Portability Toolkit • XVT-Design++: An interactive application-framework including an IDT and a C++ class library.

System Requirements: Platform-dependent—please call XVT for specific requirements.



XVT Software Inc.
4900 Pearl East Circle
Boulder, CO 80301
1-800-678-7988



FEATURES

- Portability across Windows, Windows NT, Macintosh, OS/2, OSF/Motif, OPEN LOOK, and character displays for DOS, UNIX and VMS
- Award winning GUI development system
- No royalties or runtimes
- Layered API ensures native look-and-feel on all platforms
- Minimal size and performance overhead
- Significantly reduces design, development, and test cycles
- Shortens time to market
- Flexible, customizable, extensible
- Speeds creation of application resources using a WYSIWYG interactive design tool (IDT)
- Delivers your products to the widest possible marketplace
- Based on standards. XVT is the base document for the IEEE P1201.1 working group which is developing a standard for a Uniform API.

Price:
List: \$1950
Ours: CALL

Borland® C++ for OS/2®

by Borland International, Inc.

Fast and Easy Application Development for OS/2 Use Borland C++'s graphical Integrated Development Environment (IDE) to give you easy access to everything you need to build robust applications—fast! You can edit, compile, debug, and then run your application all from within Presentation Manager, so you save time and effort.

Generate Fast Applications By taking advantage of OS/2's 32-bit architecture, Borland C++ lets you build multi-tasking applications that *defy* current speed limits.



Use Borland's World-class Tools Borland C++ radically simplifies complex tasks by giving you a complete set of tools and libraries.

- **NEW!** Turbo Debugger® GX
- **NEW!** 32-bit Turbo Assembler®
- Resource Workshop™—visually design your user interfaces!

Everything You Need! One-stop development environment, industry-standard language, performance gains, and the best tools in the business. Borland C++ for OS/2 is the only way to go!

System Requirements For the IBM or Compaq family of 386-based or higher personal computers and 100% compatibles with 4MB of memory (8MB recommended). Requires OS/2 2.0 (installation of OS/2 service packs, such as Service Pack XRO6005, is recommended). Hard disk is required.

Borland

Borland International, Inc.
1800 Green Hills Road
P.O. Box 660001
Scotts Valley, CA 95067-0001

FEATURES

- Everything you need to write OS/2 applications
- Powerful visual tools speed development
- Fast 32-bit optimized code generation and multi-tasking support
- Point and click debugging with the graphical Turbo Debugger GX
- Presentation Manager-hosted integrated development environment including background compilation
- Full ANSI C and AT&T C++ support
- Extensive third party support
- From the leaders in C and C++.

Price:

List: \$495

Ours: \$319

To order call 800 445-7899 7

Zinc Application Framework

Zinc Application Framework means platform independence, which means maximum market opportunity. Create powerful, object-oriented, C++ applications for IBM OS/2, Microsoft Windows and Windows NT, as well as OSF/Motif, DOS Text and DOS Graphics (in real or protected mode), and CIC PenDOS—all with a single set of source code.

In addition to standard interface controls such as menus, buttons, radio buttons, strings and check boxes, Zinc Application Framework also offers useful objects like tool bars, platform-independent icons and bitmaps, time, date, number and formatted string input fields.



Zinc Designer runs on every platform, provides fast interactive screen creation, integrates user functions, and generates platform-independent resources.

The innovative Zinc messaging system allows full access to native OS messages and events.

Zinc also provides videotape training. The four-hour Zinc videotape training series uses conceptual diagrams, example programs and sample code to illustrate Zinc's architecture, message processing, callback functions, deriving objects and more.

System Requirements: IBM C Set++, Borland C++, Symantec C++ or WATCOM C/C++³² for OS/2.

Z i n c
Zinc Software Incorporated
405 South 100 East 2nd Floor
Pleasant Grove, UT 84062



FEATURES

- Fully object-oriented, written with C++ to provide inheritance, encapsulation, polymorphism and persistent object storage
- Flexible multiplatform architecture with one set of source code
- Zinc Designer provides interactive design capability
- Platform independent persistent object resources
- Full 32-bit support for IBM OS/2, Windows NT, OSF/Motif and DOS protected mode
- Comprehensive documentation—over 1,400 pages in three manuals
- Videotape training series to help you internalize object-oriented programming concepts with Zinc Application Framework.

Price (w/OS/2 Key):
List: \$798
Ours: \$599

C Set++ for OS/2

by IBM Programming Systems

Industrial strength code for your mission critical applications. C Set™—the most comprehensive object-oriented application development package for building C or C++ applications on stand-alone or LAN-attached OS/2 V2 workstations, targeting an OS/2 V2 runtime environment.

With an optimized 32-bit C/C++ compiler to exploit the full power of OS/2. This extraordinary compiler generates 32-bit code for OS2 V2, enabling your applications to unleash the full power of OS/2's multitasking, graphical environment.



Its high-performance code optimizer has been specifically tailored to exploit the speed and power of i386, i486 and Pentium™ processors. To help you develop faster performing OS/2-based applications than any other compiler on the market. And it's also fully ANSI-compliant, including support for templates and exception handling!

System Requirements: All system units supported by OS/2 V2.1. *Display minimum:* VGA *Recommended:* SVGA, IBM 8514 or IBM XGA. *Memory requirements:* • C development: 8 MB RAM. • C++ development: 12 MB RAM.



IBM Programming Systems
895 Don Mills Road
North York, Ontario
Canada M3C1W3

FEATURES

- **C/C++ Debugger**—a fully integrated source level C/C++ debugger, for single and multi-threaded OS/2 and PM applications, featuring a powerful graphical user interface
- **Class Browser**—a sophisticated browser that complements the compiler by providing graphical views of C++ programs and class relationships
- **IBM Developer's Toolkit for OS/2**—a selection of language-independent build and productivity tools designed to help you make full use of the OS/2 V2 Application Programming Interfaces (APIs)
- **WorkFrame/2**—a language-independent tool that lets you customize your environment features an easy-to-use graphical user interface.

Price:
List: \$595
Ours: \$349

To order call 800 445-7899 9

Software Installer for OS/2 2.0 & 2.1



Why spend your valuable time developing the installation processes for your applications when Software Installer makes the job much easier? You can use its extensive services to install, update, restore, and delete your products. End users can install their applications from diskette, CD ROM, Local Area Networks (LAN), or from

MVS, OS/400, VM or VSE host systems.

Software Installer provides routines for:

- Creating animated Presentation Manager™ Installations
- Updating the CONFIG.SYS file
- Adding, deleting, and changing OS/2 files, INI files and Workplace Shell™ classes and objects.

FEATURES

- Multithreaded processing
- Disk generation utility
- Open and programmable interfaces
- Response file invocation for non-interactive fee installations.

Distributed Application/2™

Distributed Application/2 is a set of application programming interfaces (APIs) that provide a consistent way to access interprocess and network communication functions under OS/2, making client/server applications easier to create than ever. Distributed Application/2 and its APIs:

- Provide an API set for interprocess and network communications
- Hide the complexity of the supported protocols
- Enable you to select a protocol at run time, without changing your code
- Allow you to focus on your application, and leave the client/server communication to Distributed Application/2.



FEATURES

- Multiple protocols: APPC, NetBIOS (IBM and Novell®), OS/2 named pipes
- Access to IMS transactions
- C and REXX language interfaces (plus any other language using the C calling conventions)
- Full duplex communications
- Easy-to-use connection definition tool.



IBM Programming Systems
11000 Regency Pkwy.
Cary, North Carolina 27511

	List:	Ours:
Software Installer:	\$349	\$299
Distributed Application/2:	\$299	\$269

CA-REALIZER®

by Computer Associates

CA-REALIZER defines a new generation of development tools that handles the mechanics of event-driven programming, message passing, process sharing and other complexities behind the scenes. The user can build applications in an environment with abundant developer support, including high-level tools and intuitive debugging features. It combines a structured super-set of BASIC extended to access Windows and OS/2 objects and resources, a visual development tool and Programmable Application Tools. Available on any system compatible with Windows 3.0 or OS/2 2.0, or above; CA-REALIZER is suitable for corporate, professional and end-user developers. Use this solution to deliver



powerful applications for individual, work-group and company-wide needs. CA-REALIZER will help you create spreadsheets, charts, text editors, animation, graphics tablets and user-friendly forms from tools that can be created and manipulated by simple commands. You can also generate complete GUI applications without writing code and without SDK's, quickly and easily.

FEATURES

- Dynamic arrays and strings
- Full range of data types, record structures and multidimensional arrays
- Support for a variety of file formats from text and binary to Lotus 1-2-3, Excel, BMP, PCX, Metafile, CA-Textor™, CA-SuperCalc® and DBF
- Ability to run Windows, OS/2 and DOS applications and commands
- Full-featured integrated debugger with single-stepping, variable display, trace, call tree, breakpoints and watch expressions
- Full printing and reporting capabilities
- Full support for DDE, OLE and serial communications
- Access any Windows or OS/2 system API function or third-party database
- Access functions from languages such as C, C++, Pascal and COBOL via DLLs
- Royalty-free distribution of applications with included runtime module.

COMPUTER ASSOCIATES
Software superior by design.

Computer Associates International, Inc.
One Computer Associates Plaza
Islandia, NY 11788-7000

Price:
List: \$295
Ours: \$79

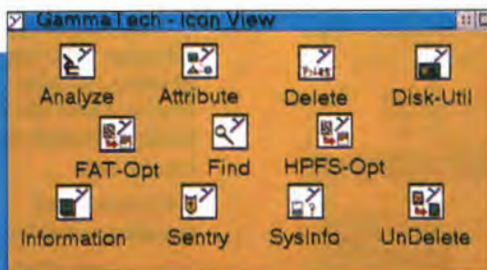
To order call 800 445-7899 11

GammaTech Utilities for OS/2



The GammaTech Utilities are a set of tools which are essential for every OS/2 workstation user. The utilities support both the High Performance File Systems (HPFS) and the File Allocation Table (FAT) file system formats, long file names and extended attributes.

The software performs the following: defragments HPFS and FAT files, undeletes accidentally erased files, recovers HPFS volumes from corrupted conditions, finds files using several criteria, analyzes disk volume integrity, protects against viruses, edits sectors, sorts FAT directories, locks files from unauthorized access, overwrites data, lists directories and alters file attributes and time stamps.



The utilities operate in both the Presentation Manager graphic mode and in text mode (command line) formats. All of the utilities are programmed in 32-bit code creating superior performance with enhanced resource efficiency. The software installs quickly and easily using the graphic installation program.

System Requirements: IBM PS/2 or 100% compatible computer running OS/2 version 2.1. Although not required, a color monitor and mouse are highly recommended. One 3 1/2" disk drive and a hard drive with at least 2 megabytes of available space.



SofTouch Systems, Inc.

SofTouch Systems, Inc.
1300 S. Meridian Ave. Suite 600
Oklahoma City, 73108-1751

FEATURES

- Undelete erased file
- Optimize HPFS and FAT volumes
- Backup INI and desk-top files
- Recover HPFS volumes
- Protect and backup boot sectors
- Identify and mark bad sectors
- Reconstruct boot sectors
- Protect/lock files
- Permanently erase sensitive data
- Mass delete selected files
- Sort FAT directories
- View and edit selected files
- Disk sector edit (ASCII or Hex)
- Display volume information
- Alter file attributes
- Add comments to files
- Display file fragmentation
- Display directory information
- SAA/CUA compliant PM interface.

Greenleaf Comm++ v2.0

by Greenleaf Software, Inc.

Class Act Comm++ will accommodate interrupt-driven circular buffered service for 35 ports at baud rates to 115,200. As a C++ communications library, it provides a hierarchy of classes which give the programmer simple access and control of serial communications. Classes are provided for: serial port controls, modem controls, file transfer protocols and calculation of check values. In addition to this, there are classes that support hardware dependent features. These classes are derived from an abstract base class. Features include support for Hayes Smartmodems™, XMODEM, YMODEM, ZMODEM, Kermit, XON/XOFF, VT52 and VT100 (subset) terminal emulation.



All the Extras Support is included for OS/2, MS-DOS, and Microsoft Windows. An automated installation procedure and examples are included. Receive free source code, access to the technical BBS, free technical support and a quarterly product newsletter. No royalties.

System Requirements: Comm++ requires an 80x86 based system with a minimum of 640K RAM (640K recommended); either MSDOS 3.0 or above, OS/2 2.0 or above, or Microsoft Windows 3.1.



Greenleaf Software, Inc.
16479 Dallas Pkwy., Suite 570
Dallas, TX 75248

FEATURES

- Supports OS/2, Windows 3.1, and MS-DOS
- COM1..COM4 support or COM1..COM8 (MicroChannel systems)
- Intelligent DigiBoard, Arnet and Star Gate multiport board support
- 16550 UART FIFO trigger level control
- XMODEM, YMODEM, ZMODEM, Kermit protocol support
- XON/XOFF software flow control handshaking
- RTS/CTS and DSR/DTR hardware flow control handshaking
- ANSI, VT52/100 terminal emulation.

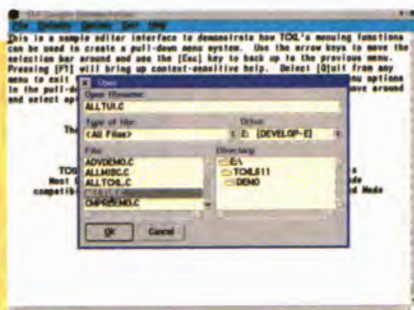
Price:
List: \$249
Ours: \$199

TesSeRact Developer's Workshop

The TesSeRact Developer's Workshop is an all-in-one, multi-platform, cost-effective package that supports development of applications for both OS/2 and Presentation Manager. The multi-platform version supports the development of applications for DOS, Windows, Protected Mode (286 & 386), OS/2, and Presentation Manager—all in one box!



Both of these packages combine the power of TCXL's CUA-style user interface with an object-oriented front-end for interfacing TCXL's and C++, an interactive user interface design tool, a powerful "drop-in" text editor with the capability to edit buffers and files totally within TCXL, and the ability to write applications for the various platforms with one set of source code.



Also provided is high speed data compression, customized printer output, and data file management, as well as the TesSeRact Ram Resident Development System—the standard toolkit for TSR development. Includes source code.

System Requirements: Supports all major compilers.

FEATURES

- Object-oriented system design
- High level flexibility
- Text manipulation/string system
- Single line input routines
- Virtual windows and viewports w/scrolling
- Virtual memory
- Dialog Controls
- Mouse support
- Scrollable selection lists
- Context-sensitive help
- Multi-field, formatted data entry forms
- Customized bar menus
- Microsoft Windows portability
- Low level portability
- Event-driven mouse/keyboard input
- Virtualized video output
- External linkages for text strings
- Graphical mouse and message icons
- Complete CUA interface controls
- Simplified installation.

IDC Innovative Data
CONCEPTS

Innovative Data Concepts, Inc.
122 North York Rd. Suite 5
Hatboro, PA 19040

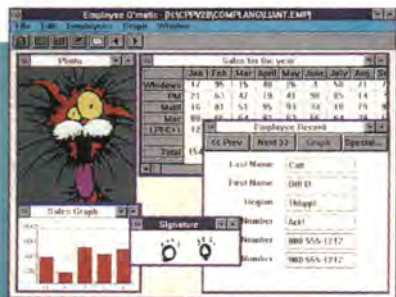
	List:	Ours:
Developer's Workshop OS/2:	\$679	\$599
Special Price (save \$300!):		\$379
Developer's Workshop/Multi-Platform:	\$999	\$899
Special Price (save \$470!):		\$529

C++/Views for OS/2

by Liant Software Corporation

Use C++/Views to help you quickly create high-quality 32-bit GUI applications for OS/2 2.x! What's more, applications developed with C++/Views are fully source-code portable to the other major operating environments—MS Windows, Motif, and Macintosh. C++/Views achieves this portability without sacrificing features, performance, or a native look and feel.

C++/Views includes a library of more than 100 ready-to-use C++ object classes, including native software components for windows, views, menus, dialogs, bitmaps, printers, graphics, etc. C++/Views also includes foundation classes that provide support for runtime type checking, construction, identification, and object persistence as well as a variety of basic data management classes such as containers, collections, ordered collections, sets and dictionaries. Let C++/Views help you dramatically reduce the design and development cycle for GUI applications.



C++/Views also includes C++/Browse, a powerful, visual, class hierarchy browsing utility. C++/Views also has a visual interface builder available for designing resources such as dialogs, menus, and bitmaps as well as generating portable resource files.

System Requirements: C++/Views for OS/2 PM supports the Zortech 3.0 (v4 or higher) and the Borland 32-bit (v1.0) compilers. IBM's 32-bit compiler will be supported in the near future. A 386-based computer with a minimum of 4 MB of memory is needed. The MS Presentation Manager Softset or Toolkit v1.2, or IBM OS/2 Toolkit v1.3 is required.

LIANT

Liant Software Corporation
959 Concord Street
Framingham, MA 01701



FEATURES

- Portability across all major operating environments
- More than 100 fully tested object classes
- Extensible—easy to create your own classes
- Uses native GUI components, not simulated
- Includes platform-specific features, no least common denominator
- Includes a visual browsing utility
- Visual interface builder available
- Supports multiple compilers
- Source code available
- No runtime licenses or royalties.

Price:

List: \$999

Ours: \$739

To order call 800 445-7899 15

Gpf 2.1 Professional Developer's Toolkit

Gpf is a WYSIWYG Graphical User Interface application development environment that takes full advantage of OS/2 2.x to create native Client/Server or Stand-alone applications for OS/2® PM or DOS/Windows®. As a 3GL (C or C++) source code generator Gpf offers all the advantages of hand coding native GUI applications, combined with the ease of a What You See Is What You Get visual programming environment. With Gpf, the designer simply paints the PM screens as they ought to appear and Gpf takes care of the rest, yet Gpf is much more than a simple screen painter or Dialogue Editor.



With Gpf, as windows, dialogues, and PM controls are created, the design hierarchy is defined. Navigation code, custom logic and context sensitive help are created and linked to objects as they designed. Adding GpfTools provides Reusable objects, Design Browsing, and Automatic Documentation to create the complete Pro Developers Toolkit.

Design a complete GUI in as little as 1/10th the time required using conventional tools!

FEATURES

- **Cross platform support:** Creation of common GUI applications for OS/2 2.x, OS/2 1.3.x, and MS DOS/Windows
- **CUA '91 controls:** Complete support for the CUA '91 Control set aids SAA compatible designs with common look and feel across platforms
- **Built in SQL support:** Automatic generation of embedded SQL for OS/2 DataBase or DB2/2
- **Speed delivery of critical applications:** Integrated development environment provides a smooth and direct transition from prototype to finished product
- **Standard 3GL code generation:** C or C++ for maximum design flexibility and optimum run time performance
- **No runtime or royalties.**



Gpf Systems, Inc.
P.O. Box 414
30 Falls Road
Moodus, CT 06469

	List:	Ours:
Full cross platform (w/GpfTools):	\$1440	\$1295
Full cross platform (w/o reusable objects):	\$1295	\$1165
Gpf-PM only (specify 16 or 32bit):	\$495	\$445
Gpf single platform (w/GpfTools, 32-bit only):	\$640	\$575
GpfTools-reusable objects (for 32-bit Gpf):	\$195	\$165

BocaSoft WipeOut & BocaSoft System Sounds

BocaSoft WipeOut is a 32-bit screen saver for OS/2 featuring numerous animated displays integrated with digital audio, password protection, screen capture, randomizer, and on-line help. A developer kit is included that allows the development of new screen savers. WipeOut also provides support for IBM Ultimation and Intel Indeo full motion video.



BocaSoft System Sounds is a 32-bit OS/2 application that allows the association of system events, keystrokes and mouse events with digital audio. The program includes over a megabyte of sound effects in Microsoft audio format. An integrated record mechanism allows the recording of custom audio files.

System Requirements: *BocaSoft WipeOut* requires OS/2 Version 2, a 3.5" floppy disk drive and 2 MB of disk space. Digital audio requires MMPM/2, which is included with OS/2 2.1, and a supported audio card. *BocaSoft System Sounds* requires OS/2 Version 2 with MMPM/2, a supported audio card, a 3.5" floppy disk drive, and 1.5 MB of disk space.



BocaSoft Inc.
117 NW 43rd Street
Boca Raton, FL 33431

FEATURES

WipeOut Features:

- Screen locking security
- Customized message display
- Developer kit for new savers
- Quick key start
- Mouse position start or disable
- Full motion video support
- On-line help.

System Sounds Features:

- Over 50 sound effects
- Over 40 attachable system events
- Pre-recorded keyboard sounds
- Developer kit for audio server
- On-line help.

Price (each):

List: \$59

Ours: \$55

To order call 800 445-7899 17

SourceLink

by OneUp Corporation

SourceLink is a programming development tool combining the functionality of hyperlink source code access, a fully functional editor, and many file manipulation utilities. This development tool creates an exciting new dimension in programming with the ability to rapidly navigate through C and C++ source code with simple mouse clicks. There is NO faster way to learn or search code. Create function call trees, lists of symbols, globals, system API calls, and other key coding elements. Double click on these display files to automatically open your source code on any drive, any directory—directly at the point of interest.



SourceLink has the capability to find code, change code, spawn compiles, and hyperlink directly to the source of error. You can run and debug REXX macros, spawn executables and manipulate files. You even have complete context sensitivity to on-line development help files.

Increase your programming productivity. SourceLink makes source code navigation fast and easy.

System Requirements: IBM OS/2 2.x or greater with 8MB of RAM and a minimum of 2MB of available disk space.

FEATURES

- Hyperlink source code navigation
- CUA compliant, integrated editor
- C, C++, and MASM support
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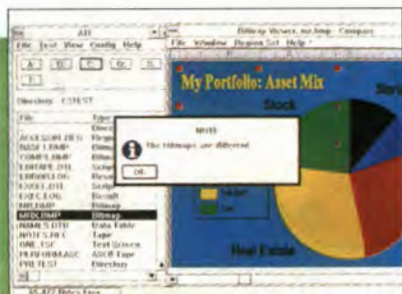
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